DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-002077 Address: 333 Burma Road **Date Inspected:** 30-Apr-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Chang xing Dao, Shangh

Quality Control Contact: Mr. Don Walton **Quality Control Present:** Yes No

N/A **Material transfer:** Yes **Sampled Items:** Yes No N/A No **Stock Transfer:** Yes N/A N/A No OK to Cut: Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coating Inspection

Bridge No: 34-0006 **Component:** See below **Bid Item:** Lot No: B #204 77, 78, 79

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE II coating inspector, Mr. Baskar Govindarajan arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE II coating inspector observed the following:

- 1. An inspection was requested on the Tower Spare struts ED1-A 6001- 1 to 8 and ED1-A 6003- 1 to 8 16 nos for Surface profile and Residual chlorides test inspection vide request no. T 341 at Blasting workshop no. 2. This Caltrans inspector observed, ABF inspectors Mr. Don Walton, Mr. Turtle, Mr. Stone and Mr. Yue performing inspection check of Profiles . All the struts found rejected by ABF Inspectors for Low profile and porosity/ weld repairs. ABF welding inspectors from Tower came in to painting shop to find out the depth of porosities observed after Blasting. They have been asked by Mr. Don Walton to mark it for Weld repair at Shop if the porosities are deep, i.e. if not in surface. Two struts from the rejected lot of 16 nos, ED1-A 6001-3, 4 have been offered for Surface profile and Residual chlorides test again after rectification of marked points vide Notification no. T 343. Residual chloride test have been conducted by ZPMC Inspectors and the results found to be approximately 20 us/cm which is acceptable as per contract documents. The surface profile on these two struts found to be in the range of 78 to 82 which is acceptable as per contract documents. International protective coatings technical service representative Mr. Li peng was found present during the course of this inspection process. (Photograph of porosities at welding of ED1-A 6003-2 is attached)
- 2. An inspection was requested on the OBG segment 9DE for DFT checking of Internal ceiling and internal floor beams vide request no. 3240 at Paint shop 1. This Caltrans inspector observed, ABF inspectors Mr. Turtle. Mr.

SOURCE INSPECTION REPORT

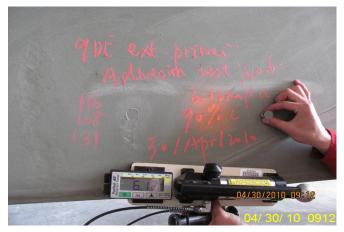
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Yue and Mr. Stone performing said inspection check on internal ceiling and floor beam surfaces. DFT of internal ceiling found accepted by ABF Inspectors. Floor beam was found rejected by ABF Inspectors for minor repairs and touch ups. As per ZPMC this will be carried out at Assembly yard. International protective coatings technical service representative Mr. Li peng was found present during the course of this inspection process.

3. An inspection was requested on the OBG segment 9DE for adhesion test of external surfaces vide request no. 3239 at Paint shop 1. This Caltrans inspector observed, ABF inspectors Mr. Turtle and Mr. Stone performing said inspection check on external surfaces at 6 places. The results carried out with calibrated pull off adhesion tester found to be in the range of 6.12 to 14.07 MPA which is acceptable as per contract documents. International protective coatings technical service representative Mr. Li peng was found present during the course of this inspection process. Photograph of Adhesion test at 6th place over the external surfaces of cross beam is attached. The result at this place is found to be 6.12 Mpa with 90 % coahesion failure.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No applicable conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest (15000422360), who represents the Office of Structural Materials for your project.

Inspected By:	Baskar, Govindarajan	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer